

INSTRUCTION TO SERVICE

| ITS: 6086 | |
|-------------|-------------------------------------|
| SECTION: | 203 Front Suspension |
| WRITTEN BY: | Tyler Omichinski / Chris Novakowski |
| SUBJECT: | Center Link Tie Rod Inspection |

ITS6086

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PROCEDURE:

- 1. Turn the main battery disconnect switch to the "OFF" position.
- 2. Raise coach in accordance with the New Flyer Service Manual.
- Locate the steering center link on the front axle.
- 4. Check for play between the threads of the adjuster sleeve, rod end, and center link tube. Zero play should be present.
- 5. Ensure the center link groove is aligned with the open part of the clamp, as shown in Fig. 1.
- 6. Ensure the visible thread length of the tie rod end (noted by "a" in Fig. 3) is the same as the visible thread of the adjusting sleeve (noted by "b" in Fig. 3). A difference of 2-3 threads is acceptable. Refer to Fig. 2 and Fig. 3.
- 7. If no thread play is detected between the threads of the adjuster sleeve, rod end, and center link tube, loosen the center link clamp and re-torque to 125 ft-lbs. Apply a torque stripe across the entire bolt head, clamp, and nut.
- If any play is detected between the threads of the adjuster sleeve, rod end, and center link tube, replace the center link as an assembly (NF P/N 6344747).
 - a. Remove and discard the self-locking nuts from the center link tie rod ends.
 - b. Use a ball joint press to separate the center link tie rod end from the tie rod arm on both sides. Discard the old center link.
 - c. On the new center link, ensure the visible thread length of the adjusting sleeve (noted by "a" in Fig. 3) is the same as the visible thread of the adjusting sleeve (noted by "b" in Fig. 3). A difference of 2-3 threads is acceptable. Refer to Fig. 2 and Fig. 3.
 - d. Install the center link tie rod ends into the tie rod arms.
 - e. Apply NEVER-SEEZ® (NF P/N 5928660) to the tie rod end threads, install a new self-locking nut (NF P/N 6344768) on each rod end, and torque them to 221 ft-lbs. Install an 8 mm Allen wrench in the end of each ball stud to prevent it from rotating while tightening the self locking nut.
 - f. Ensure the center link tie rod end clamp is correctly oriented on the center link. The opening of the clamp must be centered over the slot in the center link and positioned to allow the clamp bolt to pass through the machined recess in the end of the link. Refer to Fig. 1.
 - g. Tighten the center link tie rod end clamp bolt to 125 ft-lb. Apply a torque stripe across the entire bolt head, clamp, and nut.
 - h. Check toe-in and adjust as required. If the adjusting clamp must be loosened to adjust toe, apply a new torque stripe when the clamp is re-torqued.
- Lower coach in accordance with the New Flyer Service Manual.
- 10. Turn the main battery disconnect switch to the "ON" position.

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Figure 1: Alignment of clamp with tube groove



Figure 2: Inspection of adjuster threads

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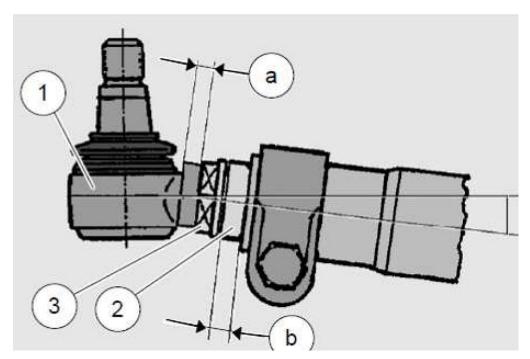


Figure 3: Inspection of adjuster threads

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| LABOUR ESTIMATE | | | | | | |
|-----------------|---|-----|-------|-----------------------|--|--|
| | Operation | Men | Hours | Labour Time M X HR | | |
| 1 | Inspect and re-torque center link adjusting clamp | 1 | 1.0 | 1.0 | | |
| 2 | Replace the center link (if required) | 1 | 0.5 | 0.5 | | |

| PARTS REQUIRED | | | | | |
|----------------|-------------|------------------|----------------------|-------|-------------|
| Item | Part Number | Description | Qty. per Coach | Units | Notes |
| 1 | 6344747 | CENTER LINK ASSY | 1 | EA | If Required |
| 2 | 6344768 | NUT LOCK HEX M24 | 2 | EA | If Required |
| 3 | 5928660 | NEVER-SEEZ® | 0.02 | EA | If Required |

| SPECIAL TOOLS REQUIRED | | | | | |
|------------------------|-------------|----------------------------|----------------------|-------|-------|
| Item | Part Number | Description | Qty. per Coach | Units | Notes |
| | | No Special Tools Required. | | | |

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